Black Rosy-finch (Leucosticte atrata)

Species Status Statement.

Distribution

Black rosy-finch breeds along cliffs and in talus slopes, in alpine areas from southeastern Oregon to western Montana, south to southern Utah and Nevada (Johnson 2002, Paprocki and Pope 2019). In winter, this species' range can extend further south in Utah, west in Nevada, and east into Colorado (Johnson 2002).

In Utah, black rosy-finch is most commonly found in the Uinta and Wasatch Mountains, but breeding has been documented in the Raft River and La Sal Mountains as well (eBird, Johnson 2002, Paprocki and Pope 2019). There are several mountain ranges in Utah where surveyors suspect black rosy-finches of breeding, but which still need to be documented, such as the Deep Creek and Tushar Mountains (Johnson 2002, Paprocki and Pope 2019).

Table 1. Utah counties currently occupied by this species (eBird, IMBCR, and Utah NHP)

Black Rosy-finch	
BOX ELDER	MORGAN
CACHE	SALT LAKE
CARBON	SAN JUAN
DAGGETT	SEVIER
DAVIS	SUMMIT
DUCHESNE	TOOELE
EMERY	UINTAH
GARFIELD	UTAH
GRAND	WASATCH
IRON	WASHINGTON
JUAB	WAYNE
KANE	WEBER

Abundance and Trends

The most recent global population estimate for black rosy-finch is 120,000; all in the United States (Partners in Flight 2019a). There is no population estimate for Utah. Due to the difficulty in surveying for this species by traditional large-scale studies, there are no trend estimates available from BBS, IMBCR, or DWR Riparian monitoring. Black rosy-finch is classified by the following organizations as:

 The International Union for Conservation of Nature - Endangered on the Red List of Threatened Species

- Partners in Flight "PREVENT DECLINE: "R" Yellow Watch List Species not declining but vulnerable due to small range or population and moderate threats" (Partners in Flight 2019b)
- U.S. Fish and Wildlife Service a priority species at the continental and Bird Conservation Region scales on the Birds of Conservation Concern list (draft USFWS 2017)

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Black rosy-finch breeds exclusively in alpine areas above the tree line, where cliffs and talus slopes provide suitable nest sites (Johnson 2002, Conrad 2015). In summer, they depend on snowpack edges where melting snowlines reveal seeds and insects that can be easily spotted (Johnson 2002).

Black rosy-finch is an altitudinal migrant, moving to sagebrush or shrubland in lower elevation valleys, benches, and foothills during winter (Johnson 2002). In winter, they feed on seed heads protruding from the snow or on exposed seeds in windswept areas lacking snow. This species will join large flocks (up to 2,000) with other species of rosy-finches, and readily uses bird feeders during the non-breeding season (Johnson 2002, eBird). Winter flocks travel in response to weather conditions, decreasing in elevation during storms and returning with fair weather.

Threats to the Species

Black rosy-finch is threatened by climate change. Breeding habitat is already restricted to high elevation mountains, and the potential need to shift upward in elevation with a warming climate is ultimately constrained by mountain summits themselves (Romme and Turner 1991, Conrad 2015, Elsen and Tingley 2015). Habitat shifting and alteration, temperature extremes, and drought effects may occur earlier in Utah than elsewhere in the range, being at the southern end of its breeding range.

Summer recreation in alpine zones is unlikely to directly disturb breeding birds. However, increased presence of common ravens in response to people littering in alpine zones could elevate their predation on black rosy-finch nests (Martin 2001).

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

Black Rosy-finch	
Medium	
Droughts	
Habitat Shifting and Alteration	
Temperature Extremes	

Rationale for Designation.

Due to the inaccessibility of black rosy-finch habitat, there is little information on life history, ecology, and populations and trends for this species. Traditional large-scale surveys like the BBS do not provide adequate population trend estimates; though estimates that exist show populations are at risk of decline (Rosenberg et al. 2016). Utah is the southernmost part of the black rosy-finch breeding range, so impacts of habitat alteration and shifting due to climate change will likely be felt here first (Johnson 2002, Conrad 2015). Determining the distribution and population status of black rosy-finch in Utah will be key for providing current and defensible data to USFWS when and if this species is petitioned for listing under the Endangered Species Act due to the effects of climate change.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate active management of this species, needed to reverse drift toward Endangered Species Act listing and to lessen related economic impacts. Impacts of listing have the potential to affect wide-range of activities and industries, but would probably be felt first by high-elevation developments (e.g., ski areas).

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